

integer from 2-10, and R is a polymer or copolymer having 1-10 monomeric fragments selected from the group consisting of lactide, glycolide, trimethylene carbonate, caprolactone and p-dioxanone; [and]

wherein -G is a leaving group selected from the group consisting of succinimidyl, maleimidyl, phthalimidyl, imidazolyl, nitrophenyl, [or] and tresyl[,]; and

wherein a combination of the first and second mixtures is initially liquid and then cures on the surface of tissue to give a flexible, substantive matrix which bonds to the tissue and has a burst strength greater than about 10 mmHg.

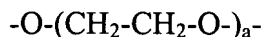
15. (Amended) The adhesive [mixture] composition of claim 1 wherein -LM- is a diester diradical of the formula[,]
 $\text{-C(O)-(CH}_2\text{)}_c\text{-C(O)-}$ where c is an integer from 2-10 and where the aliphatic portion of the diradical may be saturated or unsaturated.

17. (Amended) A method of making a tissue adhesive consisting of the step of forming a mixture of

- i) a first aqueous mixture of about 20-60 wt/vol % serum albumin in about 0.01-0.25 molar buffer at a pH in a range of about 8.0-11.0,
- ii) a second aqueous mixture of about 50-800 mg/ml of a crosslinking agent having a molecular weight in a range of about 1,000-15,000, wherein the crosslinking agent is of the formula



wherein -PEG- is a diradical fragment represented by the formula



where a is an integer from 20-300;

wherein -LM- is a diradical fragment selected from the group consisting of a carbonate diradical of the formula[,]
 -C(O)- , a monoester diradical of the formula[,]
 $\text{-(CH}_2\text{)}_b\text{C(O)-}$ where b is an integer from 1-5, a diester diradical of the formula[,]
 $\text{-C(O)-(CH}_2\text{)}_c\text{-C(O)-}$ where c is an integer from 2-10 and where the aliphatic portion of the diradical may be saturated or unsaturated, a dicarbonate diradical of the formula
 $\text{-C(O)-O-(CH}_2\text{)}_d\text{-O-C(O)-}$ where d is an integer from 2-10, and an oligomeric diradical represented by the formulas
 -R-C(O)- ,

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Carbide
 $-R-C(O)-(CH_2)_c-C(O)-$, or $-R-C(O)-O-(CH_2)_d-O-C(O)-$ where c is an integer from 2-10, d is an integer from 2-10, and R is a polymer or copolymer having 1-10 monomeric fragments selected from the group consisting of lactide, glycolide, trimethylene carbonate, caprolactone and p-dioxanone; [and]

wherein -G is a leaving group selected from the group consisting of succinimidyl, maleimidyl, phthalimidyl, imidazolyl, nitrophenyl₁ [or] and tresyl₁; and

wherein a combination of the first and second mixtures is initially liquid and then cures on the surface of tissue to give a flexible, substantive matrix which bonds to the tissue and has a burst strength greater than about 10 mmHg.
